H1K909:Electronic and Electrical Engineering

Postgraduate TaughtMSc2021

Essentials

Please note: 2020-21 courses may be affected by Covid-19 and are therefore subject to change due to the ongoing impact of Covid-19. Summaries of course-specific changes resulting from the impact of Covid-19 will be provided to applicants during August 2020.

For the latest information on our plans for teaching in academic year 2020/21 in light of Covid-19, please see www.durham.ac.uk/coronavirus

UCAS code	
Degree	MSc
Mode of study	Full Time
Duration	1 year (full time)
Start Date	October
Location	Durham City (www.durham.ac.uk/study/location/durham.city)
More information	Still have questions? (www.durham.ac.uk/study/askus/)
Department(s) Website	www.durham.ac.uk/engineering

Course Summary

Description

The main objective of the course is to educate you in the key engineering aspects of electronic and electrical engineering, enabling you to undertake responsible, creative, challenging and stimulating posts in industry or research.

The course covers the key areas of electronic and electrical engineering. In addition to the technical background provided in these subjects, hands-on experience is gained through a major individual Research and Development project, a group design project and a supporting laboratory programme.

Course Structure

The course consists of five core modules to provide an advanced engineering education in Electrical (List A) or Electronic (List B) Engineering alongside an optional module that allows students to increase their understanding in an area suited to their interests and needs. Students choose to follow List A or List B as described below. In addition to these taught modules, you will also complete a group design project and a major, individual research and development project working closely with an academic in your chosen subject area.

Electrical Engineering core taught content (List A):

- Renewable Energy Technologies
- Future Vehicles
- Electrical Energy Conversion
- Power Electronics
- Smart Energy Networks

Electronic Engineering core taught content (List B):

- Radio and Digital Communications
- Advanced Electronics Measurement
- Communication Networks
- Advanced Electronics
- Photonics

Examples of optional taught content:

Students select one optional module from the following topics:

- Internet of everything
- Optimisation

Admissions Process

Subject requirements, level and grade

A second class honours degree (typically equivalent to UK 2:1 Honours) or better in a subject which includes a significant electronic or electrical engineering content.

English Language requirements

Please check requirements for your subject and level of study (www.durham.ac.uk/learningandteaching.handbook/1/3/3/)
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How to apply

www.durham.ac.uk/postgraduate/apply

Fees and Funding

Full Time Fees

EU Student	£25,970.00 per year
Home Student	£11,550.00 per year
Island Student	£11,550.00 per year
International non-EU Student	£25,970.00 per year

The tuition fees shown are for one complete academic year of full time study, are set according to the academic year of entry, and remain the same throughout the duration of the programme for that cohort **(unless otherwise stated)**.

Please also check costs for colleges and accommodation (www.durham.ac.uk/postgraduate/accommodation/costs/).

Scholarships and funding

www.durham.ac.uk/postgraduate/finance

Career Opportunities

Department of Engineering

For further information on career options and employability, including the results of the Destination of Leavers survey, student and employer testimonials and details of work experience and study abroad opportunities, please visit our employability web pages (www.durham.ac.uk/ecs/postgraduate/employability).

Open days and visits

Pre-application open day

www.durham.ac.uk/postgraduate/visit

Overseas Visit Schedule

www.durham.ac.uk/international/office/meetus

Postgraduate Visits

PGVI or
www.durham.ac.uk/postgraduate/visit/

Department Information

Department of Engineering

Overview

The Department of Engineering offers postgraduate courses that are challenging and technologically relevant. The Department's research covers a wide range of topics, which are divided into three challenge areas: Future Energy Systems, Next Generation Materials and Microsystems, and Sustainable Infrastructure. A broad range of specialist research clusters support our activities in these areas. Durham engineering postgraduates, both taught and research, will be making a vital contribution to these challenge areas. You will have access to extensive and diverse research facilities to support your learning. For example, airflow sensors, made using cutting-edge microfabrication techniques in the Class 1000 Cleanroom, have been tested and characterised in the Department's wind tunnel facilities.

Ranking

Ranked joint 1st in the UK for Internationally Excellent or World-Leading research impact in *REF 2014*.

Website

www.durham.ac.uk/engineering